Evaluation Tool for High-Fidelity Simulation

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Introduction

Objectives:
- Describe a reliable and valid evaluation tool used in conjunction with high-fidelity simulation (HFS)
- Identify how to implement Lasater’s Clinical Judgment Rubric in high-fidelity simulation
Problem

- Ineffective measurement of clinical judgment in HFS with medical/surgical nursing students
  - Debriefing only
  - Debriefing with Satisfactory, needs improvement, or unsatisfactory rating
  - Debriefing with a tool using a point system (1 point for completing the skill or 0 points for not completing skill)
Purpose

- To compare the progression of clinical judgment after four HFS scenarios in one medical/surgical nursing course using Lasater’s Clinical Judgment Rubric (LCJR)
Significance to Nursing

- Increased use of HFS
- Clinical judgment is essential for the graduating nurse
- Evaluation of HFS is necessary to identify clinical judgment
Theoretical Model

An Integrative Model of Clinical Judgment

Noticing

Interpreting

Responding

Context Background Relationship

Expectations

Initial Grasp

Reasoning Patterns
  Analytic
  Intuitive
  Narrative

Action

Reflection on action and Clinical Learning

Reflection in Action

Outcomes

Reflecting

Clinical judgment is salient to nursing and as a pre-licensure educational outcome.

HFS improves clinical judgment.

Oral Debriefing is essential.

LCJR has reliability and validity as an evaluation tool for HFS.
Lasater’s Clinical Judgment Rubric

- Developed from Tanner’s Model:
  - Effective Noticing, Effective Interpreting, Effective Responding, and Effective Reflecting.

- Eleven Dimensions:

- Four developmental categories based on student performance.
  - Beginning, developing, accomplished, exemplary
# Lasater’s Clinical Judgment Rubric

**Simulation Clinical Judgment Rubric**

<table>
<thead>
<tr>
<th>Effective noticing involves:</th>
<th>Exemplary</th>
<th>Accomplished</th>
<th>Developing</th>
<th>Beginning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused observation</td>
<td>Regularly observes and monitors a wide variety of objective and subjective data to uncover any useful information.</td>
<td>Regularly observes and monitors a variety of data, including both objective and subjective; most useful information is noticed: may miss the most subtle signs.</td>
<td>Attempts to monitor a variety of subjective and objective data but is overwhelmed by the array of data; focuses on the most obvious data, missing some important information.</td>
<td>Confused by the clinical situation and the amount and kind of data; observation is not organized and important data are missed, and/or assessment errors are made.</td>
</tr>
<tr>
<td>Recognizing deviations from expected patterns</td>
<td>Recognizes most obvious patterns and deviations from expected patterns in data and uses these to guide the assessment.</td>
<td>Identifies obvious patterns and deviations, missing some important information; unable to continue the assessment.</td>
<td>Focuses on one thing at a time and misses most patterns and deviations from expectations, misses opportunities to refine the assessment.</td>
<td>Ineffective in searching information; relies mostly on objective data; has difficulty interacting with the patient and family; often seems not to know what information to seek and/or pursue unrelated information.</td>
</tr>
<tr>
<td>Information seeking</td>
<td>Actively seeks subjective information about the patient’s situation from the patient and family; support planning interventions; occasionally does not pursue important leads.</td>
<td>Makes limited efforts to seek additional information from the patient and family; often seems not to know what information to seek and/or pursue unrelated information.</td>
<td>The patient and family fails to collect important subjective data.</td>
<td>Ineffective in seeking information; relies mostly on objective data; has difficulty interacting with the patient and family; fails to collect important subjective data.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Effective interpreting involves:</th>
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<tbody>
<tr>
<td>Prioritizing data</td>
<td>Focuses on the most relevant and important data useful for explaining the patient’s condition.</td>
<td>Generally focuses on the most important data and seeks further relevant information but also may try to attend to less pertinent data.</td>
<td>Makes an effort to prioritize data and focus on the most important, but also attends to less relevant or useful data.</td>
<td>Has difficulty focusing and appears not to know which data are most important to the diagnosis; attempts to attend to all available data.</td>
</tr>
<tr>
<td>Making sense of data</td>
<td>Even when facing complex, conflicting, or confusing data, is able to (a) note and make sense of patterns in the patient’s data, (b) compare these with known patterns from the nursing knowledge base, research, personal experience, and intuition, and (c) develop plans for interventions that can be justified in terms of their likelihood of success.</td>
<td>In most situations interprets the patient’s data patterns and compares with known patterns to develop an intervention plan and accompanying rationales, the exceptions are complicated cases where it is appropriate to seek the guidance of a specialist or more experienced nurse.</td>
<td>In simple, common, or familiar situations, is able to compare the patient’s data patterns with those known and to develop an or explain an intervention plan; has difficulty, however, with even moderately difficult data or situations that are within the expectations of students, inappropriate requests advice or assistance.</td>
<td>Even in simple, common, or familiar situations, has difficulty interpreting or making sense of data; has trouble distinguishing among competing explanations and appropriate interventions, requires assistance both in diagnosing the problem and developing an intervention.</td>
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<thead>
<tr>
<th>Effective responding involves:</th>
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</tr>
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<tbody>
<tr>
<td>Calm, confident manner</td>
<td>Assumes responsibility, delegates team assignments, assesses patients and reassures them and their families.</td>
<td>Generally displays leadership and confidence and is able to control or calm most situations, may show stress in particularly difficult or complex situations.</td>
<td>Is tentative in the leader role; reassures patients and families in routine and relatively simple situations but becomes stressed and disorganized easily.</td>
<td>Except in simple and routine situations, is stressed and disorganized; lacks control; makes patients and families anxious or less able to cooperate.</td>
</tr>
<tr>
<td>Clear communication</td>
<td>Communicates effectively, explains interventions, asks and reassures patients and families, directs and involves team members, explaining and giving directions; checks for understanding.</td>
<td>Generally communicates well, explains carefully to patients, gives clear directions to team, could be more effective in establishing rapport.</td>
<td>Shows some communication ability (e.g., giving directions), communication with patients, families, and team members is only partly successful, displays caring but not competence.</td>
<td>Has difficulty communicating; explanations are confusing, directions are unclear or contradictory, patients and families are made confused or anxious and are not reassured.</td>
</tr>
<tr>
<td>Well-planned intervention flexibility</td>
<td>Interventions are tailored for the individual patient, monitors patient progress closely and is able to adjust treatment as indicated by patient response.</td>
<td>Develops interventions on the basis of the relevant patient data, monitors progress regularly but does not expect to have to change treatments responses.</td>
<td>Develops interventions on the basis of the most obvious data; monitors progress but is unable to make adjustments as indicated by the patient’s response.</td>
<td>Focuses on developing a single intervention, addressing a likely solution, but it may be vague, confusing, and/or incomplete, some monitoring may occur.</td>
</tr>
<tr>
<td>Being skillful</td>
<td>Shows mastery of necessary nursing skills.</td>
<td>Displays proficiency in the use of nursing skills; could improve speed or accuracy.</td>
<td>Is hesitant or ineffective in using nursing skills.</td>
<td>Is unable to select and/or perform nursing skills.</td>
</tr>
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<tr>
<th>Effective reflecting involves:</th>
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</tr>
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<tbody>
<tr>
<td>Evaluation self-analysis</td>
<td>Independently evaluates and analyzes personal clinical performance, noting decision points, elaborating alternatives, and accurately evaluating choices against alternatives.</td>
<td>Evaluates and analyzes personal clinical performance with minimal prompting primarily about major events or decisions, key decision points are identified, and alternatives are considered.</td>
<td>Even when prompted, briefly verbalizes the most obvious evaluation; has difficulty imagining alternative choices, is self-protective in evaluating personal choices.</td>
<td>Even prompted evaluations are brief, cursory, and not used to improve performance, justifies personal decisions and choices without evaluating them.</td>
</tr>
<tr>
<td>Commitment to improvement</td>
<td>Demonstrates commitment to ongoing improvement; reflects on and critically evaluates nursing experiences; accurately identifies strengths and weaknesses and develops specific plans to eliminate weaknesses.</td>
<td>Demonstrates a desire to improve nursing performance, reflects on and evaluates experiences, identifies strengths and weaknesses, could be more systematic in evaluating weaknesses.</td>
<td>Demonstrates awareness of the need for ongoing improvement and makes some effort to learn from experience and improve performance but tends to state the obvious and needs external evaluation.</td>
<td>Appears uninterested in improving performance or is unable to do so; rarely reflects, is unconcerned or belittles or overestimates the outcome (given level of development); is unable to see flaws or need for improvement.</td>
</tr>
</tbody>
</table>

(Lasater, 2007b, pp. 500-501)
# Lasater Clinical Judgment Rubric Scoring Sheet

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Observation Date/Time</th>
<th>Scenario #</th>
<th>Observation Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Clinical Judgment

**Components Noticing:**
- Focused Observation: E A D B
- Recognizing Deviations from Expected Patterns: E A D B
- Information Seeking: E A D B

### Interpreting:
- Prioritizing Data: E A D B
- Making Sense of Data: E A D B

### Responding:
- Calm, Confident Manner: E A D B
- Clear Communication: E A D B
- Well-Planned Intervention/ Flexibility: E A D B
- Being Skillful: E A D B

### Reflecting:
- Evaluation/Self-Analysis: E A D B
- Commitment to Improvement: E A D B

### Summary Comments:

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<table>
<thead>
<tr>
<th>CLINICAL JUDGMENT</th>
<th>OBSERVATION NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPONENTS NOTICING:</td>
<td></td>
</tr>
<tr>
<td>• Focused Observation: E A D B</td>
<td>- Noticed patient was in pain, asked pain, assessed ¥5, communicated with team member to review medications, stated will feel better after surgery.</td>
</tr>
<tr>
<td>• Recognizing Deviations from Expected Patterns: E A D B</td>
<td>- Identifies patterns and deviations, missing important information.</td>
</tr>
<tr>
<td>• Information Seeking: E A D B</td>
<td>- Pt continued to cry out before further steps were taken to notify dr. for pain medications.</td>
</tr>
<tr>
<td>INTERPRETING:</td>
<td></td>
</tr>
<tr>
<td>• Prioritizing Data: E A D B</td>
<td>- Makes an effort to prioritize data, attending to less relevant data.</td>
</tr>
<tr>
<td>• Making Sense of Data: E A D B</td>
<td>- Began dressing change before administration of pain medication.</td>
</tr>
<tr>
<td>RESPONDING:</td>
<td></td>
</tr>
<tr>
<td>• Calm, Confident Manner: E A D B</td>
<td>- Displays confidence in scenario</td>
</tr>
<tr>
<td>• Clear Communication: E A D B</td>
<td>- Communicated well with team.</td>
</tr>
<tr>
<td>• Well-Planned Intervention/ Flexibility: E A D B</td>
<td>- Focuses on developing a single intervention addressing a likely solution, but is incomplete. Planning on dressing change, opened and put on sterile gloves before opening dressings.</td>
</tr>
<tr>
<td>• Being Skillful: E A D B</td>
<td>- Nice job with your dressing change.</td>
</tr>
<tr>
<td>• Verification of patient prior to medications need to be done by reviewing arm band with eMAR.</td>
<td></td>
</tr>
<tr>
<td>• Nice job with saline flush.</td>
<td></td>
</tr>
<tr>
<td>REFLECTING:</td>
<td></td>
</tr>
<tr>
<td>• Evaluation/Self-Analysis: E A D B</td>
<td>- Evaluates and analyses personal clinical performance with minimal prompting. Actively participated in debriefing, verbalizing strengths and weaknesses.</td>
</tr>
<tr>
<td>• Commitment to Improvement: E A D B</td>
<td>- Shows a desire to improve personal performance.</td>
</tr>
<tr>
<td>SUMMARY COMMENTS:</td>
<td></td>
</tr>
</tbody>
</table>
Research Design and Method

- Quantitative
- Nonexperimental descriptive study
Sample

Convenience Sample

- Inclusion
  - Enrolled in NCA I
  - Participated in all 4 progressive scenarios
  - Rubric completed for all the scenarios

- Exclusion
  - Rubrics not completed
Statistics

- N = 19
- Age
  - 42% age 21–23
- Gender
  - 84% female
- Job in healthcare
  - 37%
Findings

Scenario 1

- Beginning (1)
- Developing (2)
- Accomplished (3)
- Exemplary (4)

Scenario 4

- Beginning (1)
- Developing (2)
- Accomplished (3)
- Exemplary (4)
Limitations

- Convenience sample
- Selection bias
- Timing
- Different instructor raters
Implications

- Clinical judgment is essential to the nursing profession
- Need to evaluate clinical judgment before graduation
- Use of the tool to communicate with students and other faculty
- Assignment of clinical experiences that are reflective of the students' clinical judgment development
Future Research

- Evaluating LCJR in additional nursing courses
- Evaluating clinical judgment from junior to senior year
- Reflective journaling after simulation scenarios
- Video recording of simulation scenarios
Conclusion

- LCJR is an effective tool to measure a pre-licensure nursing students clinical judgment development after participating in progressive HFS in a medical surgical nursing course.
QUESTIONS
References


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